

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY OR

**(19) World Intellectual Property Organization
International Bureau**



**(43) International Publication Date
25 August 2005 (25.08.2005)**

PCT

(10) International Publication Number
WO 2005/077441 A2

(51) International Patent Classification⁷: A61M 5/20 5/21

(21) International Application Number:

PCT/EP2005/050711

47, CH-1093 La Conversion (CH). MACLEAN, Timothy, John [GB/GB]; Flat 3, 1 Edward Street, Bathwick, Bath and South East Somerset BA2 4DU (GB).

(22) International Filing Date: 17 February 2005 (17.02.2005)

(74) Agents: **JORIO, Paolo et al.**; Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).

(25) Filing Language:

English

(26) Publication Languages:

6

(30) Priority Date:

Priority Data: 04100647.9 18 February 2004 (12:22:22.000)

(71) **Applicant (for all designated States except US):** ARES TRADING S.A. [CH/CH]; Zone Industrielle De l'Ournet-taz, CH-1170 Aubonne (CH)

(72) Inventors; and

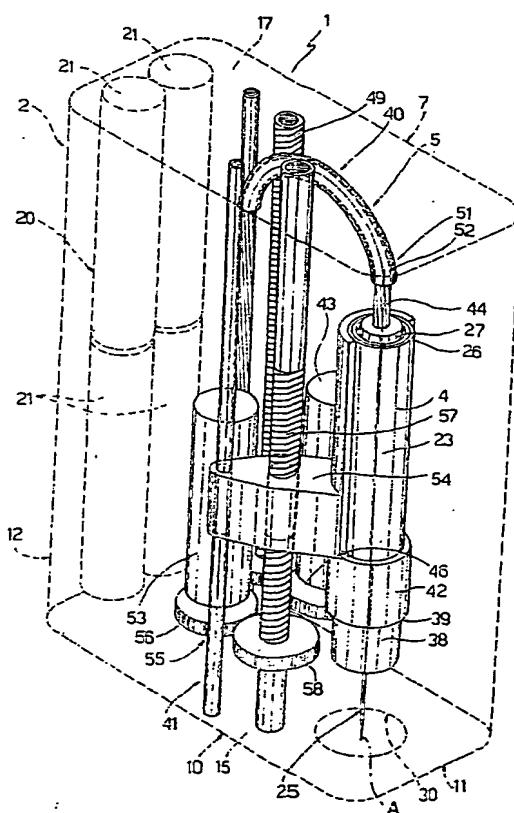
(75) Inventors/Applicants (for US only): PONG-
PAIROCHANA, Vincent [CH/CH]; Route de Belmont

(81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM)

[Continued on next page]

(54) Title: HAND-HELD ELECTRONICALLY CONTROLLED INJECTION DEVICE FOR INJECTING LIQUID MEDICATIONS



(57) Abstract: There is described a hand-held, electronically controlled injection device (1) for injecting preset doses of liquid medications, having a housing (2) for receiving a cartridge (4) containing the liquid medication and having a contact surface (16) for contacting a patient's skin; and actuator means (41) for moving the cartridge (4) within the housing (2) to and from the contact surface (16).



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, SU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*